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1NC—Russian Aerospace DA

US decline is the driving force behind growing Russian leadership—plan causes a tradeoff

Kevin O’Flynn, “Space programme: American astronauts hitching a ride with Russia's Soyuz,” Telegraph(UK), 6 April 2010, <http://www.telegraph.co.uk/sponsored/russianow/society/7559293/Space-programme-American-astronauts-hitching-a-ride-with-Russias-Soyuz.html>

While Moscow expands its space programme and designates 2011 as the year of the Russian cosmonaut, the United States is cutting back on its investment in space exploration and preparing for increased cooperation with the Russians On April 2, new Soyuz crew members, two Russians and one American, launched from the Baikonur Cosmodrome in Kazakhstan. Circling the planet, the crew will engage in intense cooperation unknown on the ground. Down on earth, Russian-American space cooperation has increased, but there is also unease as the power of the players is shifting. Russia will fuel space exploration once again, while the US vision appears dampened. America is relying more and more on the Russian federal space programme for key assistance. As the United States reprioritises its programmes, the country will rely on Russia to take its astronauts into space. Nasa has long spent more money on more programmes than Russia's space agency. But President Barack Obama has slashed Nasa's dreams of returning to the moon. Building new spacecraft for the exploration of Mars is again a flight of fancy. At the same time, the Russian space industry is once more feeling the warm glow of state backing. There has been concerted investment in recent years, an investment that fits in well with the Putin doctrine of trying to restore Russian pride through capacity.

Decline in Russian aerospace competitiveness is the biggest internal link to global prolif

Sam Vaknin, “Pinks in Space: The Space Industry in Central and Eastern Europe,” United Press International, updated December 2005, <http://samvak.tripod.com/pp126.html>

The dark side of Russia's space industry is its sales of missile technology to failed and rogue states throughout the world. Timothy McCarthy and Victor Mizin of the U.S. Center for Nonproliferation Studies wrote in the "International Herald Tribune in November 2001: "[U.S. policy to date] leaves unsolved the key structural problem that contributes to illegal sales: over-capacity in the Russian missile and space industry and the inability or unwillingness of Moscow to do anything about it ... There is simply too much industry [in Russia] chasing too few legitimate dollars, rubles or euros. [Downsizing] and restructuring must be a major part of any initiative that seeks to stop Russian missile firms from selling 'excess production' to those who should not have them." The official space industry has little choice but to resort to missile proliferation for its survival. The Russian domestic market is inefficient, technologically backward, and lacks venture capital. It is thus unable to foster innovation and reward innovators in the space industry. Its biggest clients - government and budget-funded agencies - rarely pay or pay late. Prices for space-related services do not reflect market realities. According to fas.org's comprehensive survey of the Russian space industry, investment in replacement of capital assets deteriorated from 9 percent in 1998 to 0.5 percent in 1994. In the same period, costs of materials shot up 382 times, cost of hardware services went up by 172 times, while labour costs increased 82-fold. The average salary in the space industry, once a multiple of the Russian average wage, has now fallen beneath it. The resulting brain drain was crippling. More than 35 percent of all workers left - and more than half of all the experts.

Prolif causes extinction from arms races and miscalculations

Utgoff '02

(Deputy Director of the Strategy Forces, and Resources Division of the Institute for Defense Analyses, Victor, “Proliferation, Missile Defence, and American Ambitions,” Survival, Volume 44, Number 2, Summer)

In sum, widespread proliferation is likely to lead to an occasional shoot-out with nuclear weapons, and that such shoot-outs will have a substantial probability of escalating to the maximum destruction possible with the weapons at hand. Unless nuclear proliferation is stopped, we are headed toward a world that will mirror the American Wild West of the, late 1800s. With most, if not all, nations wearing nuclear 'six-shooters' on their hips, the world may even be a more polite place than it is today, but every once in a while we will all gather on a hill to bury the bodies of dead cities or even whole nations.

UQ

Russia investing in space travel now—multiple missions planned

Arkhipov and Pronina 4-5 (Lyubov and Ilya “Russia Speeds Up Space Mission Plans as U.S. May Cut Spending” 4/5/2011) <http://www.bloomberg.com/news/2011-04-04/russia-speeds-up-moon-mars-plans-as-u-s-may-cut-space-funds.html> DOA 7-21-11

Russia may accelerate planned missions to the moon and Mars as it seeks to maintain its lead over China in space exploration and close the gap with the U.S. Russia may start manned flights to the moon by the end of the decade, 10 years earlier than previously planned, and establish a base there by 2030, according to Russia’s Roscosmos space agency. Russia may also send a man to Mars by 2040. “It is the first time that the government has allocated decent financing to us,” Anatoly Perminov, head of the Russian space agency Roscosmos, said in a phone interview on April 2. The agency’s $3.5 billion budget for 2011 has almost tripled since 2007, reaching the highest since the collapse of the Soviet Union in 1991. “We can now advance on all themes a bit,” Perminov said. Unlike 50 years ago, when beating the U.S. into space marked a geopolitical victory in the Cold War, Russia is focusing on the commercial, technological and scientific aspects of space travel. President Dmitry Medvedev has named aerospace one of five industries the government plans to nurture to help diversify the economy of the world’s largest energy supplier away from resource extraction. “We are increasing the space budget as the time has come for a technological breakthrough,” Dmitry Peskov, the spokesman for Prime Minister Vladimir Putin, said by phone yesterday. “We need to replace outdated infrastructure and continue to support the flagship status of the space industry.”

UQ

Russia funding space exploration efforts now

Arkhipov and Pronina 4-5 (Lyubov and Ilya “Russia Speeds Up Space Mission Plans as U.S. May Cut Spending” 4/5/2011) <http://www.bloomberg.com/news/2011-04-04/russia-speeds-up-moon-mars-plans-as-u-s-may-cut-space-funds.html> DOA 7-21-11

Russia may be able to complete a Mars mission within 12 years if it is included in the new federal space program, Karash said. Roscosmos is working on a plan that will start in 2015, focusing more on outer space than before, Perminov said in the interview. A flight to Mars is more likely in cooperation with other space programs, according to the Roscosmos plan. Roscosmos last June began a Mars flight simulation program, locking three Russians, two Europeans and a Chinese astronaut in 1,750 square-meter (18,800-square-foot), five-module complex to live there in isolation for 17 months. Russia will need a new rocket, a new manned spacecraft for crews of between four and six members and a new launch site to operate manned flights as early as in 2018, Perminov said. The new rocket, Rus-M, which is to become Russia’s main vehicle for manned spaceflights, should be ready for the 2015 start of Russia’s new space program, he said. Cosmodrome Vostochny in Russia’s Far East will launch unmanned craft from the end of 2015, in line with the Roscosmos plan. The country will continue to use Kazakhstan’s Baikonur Cosmodrome until 2050. Russia is also considering building a new-generation orbital station

UQ—Russian Leadership

**Russian space leadership is increasing now**

Interfax-AVN ’10 (“Russia May Become 'Absolute' Leader in Space Exploration” The School of Russian and Asian Studies) <http://www.sras.org/russia_may_become_absolute_leader_in_space_exploration> DOA 7-22-11

The U.S. administration's decision to abandon ambitious space exploration programs, including a manned Lunar mission in 2020, is giving Russia a chance to strengthen its position in manned space flight projects, Yuri Kara, a member of Russia's Tsiolkovsky Cosmonautics Academy, told Interfax-AVN. "In my opinion, Russia has received an amazing carte blanche in order to take over the 'flag' of the leadership in space exploration from the United States," Kara said. On Monday, President Barack Obama announced in his 2011 budget request that he would cancel U.S. plans to send humans back to the moon, saying the project was too expensive. In the next 5-7 years, Russia will be the only country capable of delivering crewmembers to the International Space Station. But Russia should also start working on a manned mission to Mars, the expert said. “Today, Russia needs to focus its efforts on the Mars program. The time has come for it to become the absolute space leader," Kara said. In this case, "other states will join" space exploration projects implemented by Russia, he said. “I am not speaking about Russia's monopoly on this area. But it [Russia] has been playing a leading role and, consequently, it will be able to determine the configuration of the future Mars mission," he added.

UQ—Russian Leadership

Russia is making more advancements than anyone one else in the new space race

Kislyakov ’10 (Andrei, “New impulse to Russian space rockets”) http://english.ruvr.ru/radio\_broadcast/36564197/37256125.html

Russia’s space industry is ending the year without mishaps. Although old headaches and problems are still there, things have not changed for the worse, and, in our troubled times, that is quite an achievement. Despite the crisis, Russia is leading the world in rocket launches. Russia made 27 launches in 2008, one more than in 2007 and 32 launches last year caring into orbit 29 domestic and 20 foreign payloads. This is a post-Soviet record. The Americans dropped markedly behind, with 14 launches, including one unsuccessful attempt, the Falcon-1. In January to October this year, 85 satellites were injected into space, with the largest number, 35, launched by Russia. In this case, however, it acted as a traditional freighter and orbited more foreign satellites than its own. Unfortunately, in spite of the fact that Russia leads the world in rocket launches, it is still using technology created fifty years ago. Its rockets are robust, but, there is a limit to everything. It seems it is time to roll out new launch vehicles. At the same time, it is hard to disagree with the Russian Space Agency (Roscosmos) that launch services require high technologies, of the same type that are used to develop nano-products, and Roscosmos is determined to stay ahead despite the global crisis. It is common wisdom that most efforts are needed where success is assured. Russia’s space navigation system - Glonass is a nice example of that. Its 26 satellites are to be joined by three more by the end of the year covering all of Russia. Good progress was reported on the ground. The terrestrial infrastructure for space monitoring has been improved and space findings are being used with greater effectiveness. It is also gratifying that college and university students are actively joining the effort. In 2008, three Russian universities, the Siberian and Southern Federal universities and Tyumen State University, set up space monitoring centers. The technologies they are using were developed in Russia by the Scan X Engineering Technology Center. The centers serve to observe the environment in Russia’s regions from space. But, to be effective, they need a large number of remote-sensing satellites, which are unfortunately lacking. However, next year’s plans include launching more Earth and weather satellites. If everything goes well, Russia will acquire its own constellation of weather satellites by 2013. Given a large and upgraded fleet of rockets and spacecraft of all types, Russia may become the absolute space leader at the beginning. To achieve this, the Russian government promised to replace its key space assets, inherited from the former USSR, with a brand-new triad of space infrastructure for the 21st century. In addition to a next-generation manned spaceship, Russia committed to build a new launch site and a fleet of rockets with a wide range of capabilities. By the end of 2007, we had made the potentially momentous decision to develop a new launch facility for manned missions in the nation's Far East. On November 6 that year, President Putin signed a decree on the creation of the Vostochny ("Eastern") launch site in the Russian Far East .When built, the new launch site would mark a historic shift of the Russian manned space program from Baikonur Cosmodrome in Kazakhstan to its own territory. From the moment the Soviet Union disintegrated in December 1991, Russian officials have promised to abandon Baikonur and shift operations to the existing launch site in Plesetsk and to a newly built facility in the Far East. However, the severe financial crisis of the 1990s stalled all these plans. More than a decade later, record-high oil prices allowed Moscow’s ambitions in space be more realistic .The creation of the new launch site aimed to end Russian dependency on Kazakhstan, whose government charged multi-million-dollar annual fees for the rent of Baikonur. The price tag of the whole undertaking (apparently including the development of the launch site, a new family of launch vehicles and a next-generation spacecraft was estimated at $ 60 billion." Are you kidding when talking about a new family of launch vehicles and spacecraft?” you may ask. Not at all. The Energomash Science and Production Association has developed the new RD-191 rocket engine, meant to equip Angara advanced carrier rockets, ready for mass production. Why is this development unique? The high cost of putting a payload into space has always been a headache for launch customers. Huge and expensive multistage rockets are burnt up in just one launch. For decades Russian and Western engine building specialists have been wrestling with the problem of developing a re-useable rocket engine which could be brought back to Earth for further use after having worked its portion of flight. The oxygen-kerosene RD-191 is a further development of the RD-170-180 family. RD-180s are exported to the United States, where they are widely used to equip American-made Atlas carrier rockets. The RD-191 is a highly versatile engine, capable of working in two modes, both as first-stage and second-stage engine. Russian engineers added a limited amount of hydrogen to the oxygen-kerosene fuel, and managed to achieve simultaneous and stable combustion of all the three components. The new engine was originally developed as a re-useable one. When other engines are used, the burnt-out stages fall down to Earth, posing a serious threat both to the ecology of the impact areas and people's lives. The RD's recoverability and repeated use will cut payload deployment costs several times over. To be fair, it should be said that the Americans were the first to demonstrate the feasibility of a re-useable liquid-fuel rocket engine. In the mid 1990's, a small Delta Clipper single-stage rocket lifted off the launch pad and successfully returned. However, the Americans decided to exploit their success, joining forces with Russia. Between 1994 and 1995, Energomash specialists worked on a joint program to develop a re-useable rocket engine. Soon, however, the U.S. abstained on accepting Russian services, and classified all work in the field. Boeing was working on a multi-billion dollar Space Launch Initiative program to develop an advanced re-usable launch vehicle. Simultaneously, NASA tendered development of a next generation re-useable carrier rocket. The European Space Agency also tried to develop re-usable engines. However, neither NASA nor Europe seemed to have obtained any significant results. In the near future, Russia is likely to have a variety of Angara carrier rockets fitted with RD engines, capable of deploying payloads of between 1.5 and 30 tons in low earth orbit. Therefore, the global launch services market can count on Russia for the next few decades.

UQ—Russian Aerospace

Russia is receiving large military aerospace orders and joining key joint ventures in the squo—but that could change

UPI, “India set to buy 300 aircraft from Russia”, 10/12/2010 Oct. 12, 2010 at 6:54 AM http://www.upi.com/Business\_News/Security-Industry/2010/10/12/India-set-to-buy-300-aircraft-from-Russia/UPI-56841286880845/

NEW DELHI, Oct. 12 (UPI) -- India has announced plans purchase as many as 300 combat aircraft from Russia in a joint agreement including the development and production of the aircraft. Speaking to reporters during a news conference, Indian Defense Minister AK Antony said Russia would supply as many as 300 fifth-generation fighter aircraft and about 45 multi-role transport planes. India will receive 250-300 advanced fighter jets, Antony said. "These are the two major projects for the next 10 years which will be a shining example of Indian-Russian cooperation," he said. He said the project along with a venture agreed to earlier this year to jointly develop a multi-role transport aircraft would become the flagship of Indian-Russian collaboration programs. "Some technical formalities between the governments is [still] needed and I am sure we will be able to complete [the agreement] very soon ... within a few months," Antony said at the news conference. Details of the joint development of the fifth-generation aircraft program weren't announced but are widely expected to be similar to the transport aircraft program, local media in Russia suggested. The fifth-generation fighter planes, the St. Petersburg Times reported, will be produced by Russia's Sukhoi and India's National Aerospace Laboratories. A Russian-drafted contract has been submitted for India's approval. "It is too early to talk about the price of the deals," Konstantin Makiyenko, deputy director of the Center for Analysis of Strategies and Technologies, told the newspaper. The contracts that are being prepared will be signed in December during Russian President Dmitry Medvedev's planned visit to India. Experts have suggested that each fighter aircraft could be worth in excess of $100 million. Defense News quoted Indian Defense Production Secretary R.K. Singh saying the cost of the program would be worked in stages. "At present a $300 million preliminary design contract for the FGFA program is currently under the (Indian) government's consideration," Singh said. The multi-role transport aircraft deal was signed last month between Hindustan Aeronautic Ltd. and Russia's United Aircraft Corp. and Rosoboronexport. The project is estimated at a value of $645 million. Bent on bolstering its military might, India has recently boosted its defense ties with Russia. In a related agreement, officials in Moscow say they are waiting for clearance from New Delhi to supply the country with 22 attack helicopters and 15 heavy lift helicopters. "As soon as we get the contract we will provide them," Russian Defense Minister Anatoly Serdyukov said after talks with Antony. India plans to mothball its mainstay MiG-21 Soviet-era fighter jets, dubbed "flying coffins" because of their dismal safety record. India is in the process of acquiring 270 Sukhoi jets worth $12 billion. It is also set to award a contract for 126 fighter planes as part of a separate $12 billion deal for which six global aeronautical giants are competing.

UQ—AT: Econ Collapse Overwhelms

Airline industry will overcome econ problems

Oleg Panteleev, Chief Editor of Aviaport, graduated from Moscow Aviation Institute (aircraft engine department) modified 9/23/2010 <http://www.russianavia.net/index.php#state=InterviewDetail&id=61>

Many regional airports are currently developing large investment programs. Will general lack of capital influence that? What are the possible solutions for the Russian transport sector to continue the modernization? According to the transport strategy, Russia will finance the development of infrastructure. In case of air transport, that implies airports and aeronavigation equipment. In case of on-ground infrastructure, the state invests in airfields and airport facilities. Each airport, according to its attractiveness, can count with private investments as well. A worse investment climate had a negative impact on some investment projects, but, as soon as the economy changes its course from fall to growth, airport facilities will rebuild their attractiveness for the investors. We should admit that the crisis allowed reviewing the attitude to the airport infrastructure and get a more weighted approach to this kind of business. In many cases projects were implemented with clearly excessive financing. Now airport infrastructure development projects become more and more realistic.

UQ—Brink

**Russia has big plans for space and their technological capability is increasing—but they could still fail to attain leadership due to the plan**

Osborn 4-8 (Andrew, “Russia plans moon base, Mars mission: Promise made 50 years after Gagarin's voyage” 4-8-2011,The Vancouver Sun) <http://www.vancouversun.com/technology/Russia+plans+moon+base+Mars+mission/4580202/story.html> DOA 7-22-11

Read more: http://www.vancouversun.com/technology/space-shuttle/Russia+plans+moon+base+Mars+mission/4580202/story.html#ixzz1SrzrOapo

Russia has announced that it intends to build a base on the moon within 20 years, which it plans to use as a staging post for a manned mission to Mars. The promise was made as Prime Minister Vladimir Putin chaired a meeting on Russia's space program just days ahead of the 50th anniversary of Yuri Gagarin becoming the first human in space. The Kremlin is using Tuesday's anniversary to boost patriotic sentiment and briefing documents handed out before the Putin's meeting showed it is determined to restore the nation's space-program to its Soviet-era glory. "Above all, we are talking about flights to the moon and the creation of a base close to its north pole where there is likely to be a source of water," the briefing document said. A manned mission to Mars would be possible after 2030, the report added. Putin said Russia was already responsible for 40 per cent of all space launches but said it could do better. "I think we can up that by five or even 10 per cent in the foreseeable future," he said. The Kremlin is pouring more money into its program with plans for a new cosmodrome and a new spacecraft well advanced. However, Alexander Serebrov, a former cosmonaut, said that talk of a moon base was premature. He said: "Our scientists are of an age that means they will not live to see these things." Energy-rich Russia's space budget for 2010-2011 is 200 billion rubles ($6.7 billion Cdn), which Putin said made it the world's fourth-largest spender on space after U.S. space agency NASA, the European Space Agency and France. "Such resources enable us to set serious goals," Putin said. Russia, which has used the Baikonur Cosmodrome in ex-Soviet Kazakhstan for all manned launches since Gagarin's, would begin sending humans into space from the facility it is building in Vostochny in Siberia starting in 2018. "It is worth recalling that our automatic stations in the '50s and '70s were first in reaching the moon, Mars and Venus. These achievements are forever written into the history of space research," Putin said. "Now Russia is returning to researching the planets of the solar system." The late Soviet cosmonaut Gagarin became the first human in space on April 12, 1961, orbiting Earth in a 108-minute flight that stunned the world and raised the stakes in the U.S.-Soviet space race. Half a century later, Russia is set to be the only country to take crews to space after NASA mothballs its shuttle program later this year. Russian space spending is far smaller than that of NASA, whose proposed budget for fiscal 2011 is $18.7 billion, but it has increased in recent years. Business daily Kommersant reported that Russia's 2007 space budget was $1.4 billion. But deputy economy minister Andrei Klepach predicted Russia would face a space spending squeeze in 2015-2016 unless it makes long-term budget plans, through 2025, that would include moon research and other programs. Scientists at the meeting were divided over the future direction of the space program and whether it should set its sights on the moon or Mars. Lev Zelyony, director of Russia's Space Research Institute, said it should first focus on the moon, predicting a new space race because of the recent discovery of water there. "Where there are resources, there is always competition."

Link: Space

**Russia hopes to assert their dominance and ensure their economic leadership through space exploration**

Perminov ’9 (Anatoly, Russian rocket scientist, mechanical engineer, General Director of Russian Federal Space Agency. “SPACE ACTIVITIES IN RUSSIA” Military Parade) <http://dlib.eastview.com/browse/doc/20573420> DOA 7-21-11

It is difficult to imagine the modern world without space facilities. Over 100 countries are involved in space-related activities today. Russia’s state interests in the use of space have been reflected in a number of decisions taken recently by the Russian President and Government. In 2008, the Russian President approved the “Basics of Russia’s Space Policy 2020 and Beyond,” a core document defining the development prospects for our cosmonautics, its future contribution to the national economy and security. According to the document, the primary goals of the national space policy are as follows: first, to ensure Russia’s guaranteed access to space, safeguard Russia’s state interests in space activities, form and keep the required complement of the orbital constellation, space launch vehicles and ground space infrastructure facilities, maintain Russia’s leading positions in piloted space flights; second, to create scientific, technical and technological conditions for implementing large-scale space projects, establish solid international links for conducting joint space research. The goals for space activities, the objectives and priorities of the space industry development focused on ensuring Russia’s economic leadership in the 21st century have been reflected in the “Concept for Russia’s Long-Term Socioeconomic Development through 2020” which is being implemented in difficult global financial and economic crisis conditions. It is vital to develop such mechanisms which will help meet the strategic objectives and take strong positions in the post-crisis world. It is precisely in this context that the Federal Space Agency considers the situation and prospects for the Russian space activity at the present stage.

Link: Moon

Current disregard for lunar missions cements Russian leadership—plan would reverse status quo trends

“Politicians fight to keep America’s moon mission alive,” The Guardian, 1 February 2010, <http://www.guardian.co.uk/world/2010/feb/01/moon-mission-obama-budget>

The announcement of an end to immediate ambitions for an American to again reach the moon, on the seventh anniversary of the Columbia space shuttle disaster, sets the stage for a furious battle in Congress over US manned space exploration. Politicians from Florida, Texas and Alabama, three states that have lost thousands of jobs in the space industry from this year's planned retirement of the ageing shuttle fleet, promised a fight to keep the moon programme, Constellation, alive. "They are replacing lost shuttle jobs too slowly, risking US leadership in space to China and Russia, and relying too heavily on unproven companies," said Bill Nelson, a Democratic Senator for Florida and former astronaut who flew one mission in 1986. Michael Griffin, who resigned as Nasa chief when Obama took office, branded the plan "disastrous", likening it to Richard Nixon's cancellation of the Apollo programme in the 1970s. "It means that essentially the US has decided that they're not going to be a significant player in human space flight for the foreseeable future," he told The Washington Post. Nasa has already spent more than $9bn on Constellation, including testing the Ares I rocket that was to have replaced the shuttle as transport from Earth to the international space station and beyond. The programme was "based largely on existing technologies, over budget, behind schedule, and lacking in innovation", according to Obama 's budget report. "The truth is that we were not on a path to get back to the moon's surface," said Charles Bolden, the new Nasa administrator.

Link Magnifier

Continued investment in Russian aerospace is key to its success—any substantial increase in US exploration directly trades off with Russian competitiveness

Logsdon and Miller ‘1 (John M. Logsdon and James R. Millar, “U.S.-Russian Cooperation in Human Space Flight: Assessing the Impacts,” Space Policy Institute, February 2001, <http://www.gwu.edu/~spi/assets/docs/usrussia.pdf>)

As one workshop participant noted: "In the immediate aftermath of the Soviet break-up and through the mid-1990s, however, Russia's space/missile industry suffered steep declines in state orders, stimulating a desperate search for foreign partners that might enable it to maintain its workforce and production lines. A number of deals were made during this period with states of proliferation concern (such as Iraq, Iran, and India). At the same time, the simultaneous development of initial contacts with Western space interests raised another, more positive outlet for Russia's products and creative energies. A struggle between these two tendencies began that continues to this day." Though budgetary constraints on the funds available for space cooperation have limited its scope, "Russian leading producers in the space/missile industry (like Khrunichev, Energomash, and others) have redirected their main productive focus from weapons for the Russian military to civilian products for Western companies. This support has helped keep missile specialists from immigrating abroad, kept the industry alive, and allowed Russia to continue as a leading participant in international space development, giving Russians themselves hope for the country's transformation in a positive direction. Through this process, a sector once exclusively state-run, highly secretive, and extremely nationalistic has evolved into a much more open, more civilian-oriented, and more internationally focused industry." Another participant noted that "Among Russia's export-oriented hi-tech industries, RKA's7 managed and coordinated space industry is regarded as the most Western-oriented. Its Director General Yuri Koptev has a reputation of an industrial leader promoting pro-Western values and joint projects." Another added, "The Russian space sector has come a long way. If you look back ten years the space sector was totally within the military establishment, the so-called military industrial complex. It was an immense success for Yuri Koptev to take over the Russian space sector from the military - this was both successful and a massive bureaucratic struggle. This was,actually, a tremendously successful conversion; it is not complete, but still impressive." Also, "Russia's commercial partnerships with U.S. aerospace companies play a pivotal role in complementing the ISS engagement. If the ISS project provides Russia an opportunity for highly visible international space cooperation and limited financial support, the real flow of hard currency comes from a variety of commercial contracts. They not only keep the space industry afloat but also help fulfill Russia's ISS obligations. In other words, the U.S. government-funded ISS project helped develop a mentality and infrastructure for U.S. companies to step in and engage Russian partners in their own meaningful commercial contracts." As a result, "Unlike Russia's other hi-tech sectors, the space industry has been successful in developing a degree of compatibility with Western research standards, business practices, and political sensitivities. "In particular, Lockheed Martin has been a leader among the U.S. aerospace industry in developing partnerships with Russia,8 and "Lockheed Martin's pitch to promote its space partnerships with Russia is based on the need to make the world safer by engaging thousands of highly skilled Russian aerospace engineers and scientists in commercial pursuits, thereby fulfilling cooperative threat reduction objectives. Moreover, because this is being done on a company-to-company basis, there is no expenditure of public funds and the presence of meaningful opportunities to affect real change in the way business is carried out in Russia. . . . This commercial cooperation promotes accountability and adherence to the international export control regimes. Lockheed Martin's business may be more effective than U.S. diplomatic efforts and sanctions in persuading Russia to steer clear of cooperation with rogue countries."

Link Magnifier: Zero-Sum

Russia is catching up to American aerospace—competition is zero sum

Futron ’10 “U.S. Edge Erodes, Non-Traditional Players Ascend, and Competition Intensifies,” 20 July 2010, http://www.futron.com/1254.xml?id=1022

“The 2010 results show that even as countries continue to collaborate in space, competition is growing more intense,” observes Futron Chief Operating Officer Peggy Slye. “Dominant actors are increasingly challenged by a second and third tier of space leaders, and the competitive gaps among all nations are narrowing.” 2010 Competitiveness Trends Among Ten Leading Nations United States The U.S. remains the clear global leader, but the county’s position has eroded in each of the past three years. The formulation of a new national space policy is a step in the right direction, but as Futron CEO Joe Fuller notes, “To retain its leadership position, the U.S. must leverage its secret space weapon—American industry—and align it with strategy, policy, and budget.” Russia In 2010, Russia was a clear winner, based on the doubling of its space budget and renewed focus on monetizing national space investment. “NASA and the U.S. government could learn a lot from Russia,” says Jonathan Beland, a Futron analyst specializing in the region. “Russia has become partner of choice for space agencies around the work seeking to develop new capacity. From South Korea to China, from private enterprise to governments, Russia is capitalizing on its space investments and developing long-term relationships with emerging powers.”

2NC—Russian Economy Add-On

Aerospace is crucial to the Russian economy and competiveness

Sergei Ivanov Russian Defense Minister, Deputy Prime Minister and Chair of Board of Unified Aircraft Corporation "DEPUTY PRIME MINISTER SERGEI IVANOV: THE PRIORITY IS TO PRODUCE MODERN AIRCRAFT OF VARIOUS TYPES", Izvestia, December 14, 2006, p. 2, http://www.wps.ru/en/pp/story/2006/12/14.html

Sergei Ivanov: I'll put it this way: as deputy prime minister and defense minister, I have been instructed to chair the OAK board of directors. First of all, air power is becoming increasingly important for national security. Secondly, over the past century, the aviation sector's needs have stimulated the development of advanced technologies - serving as a driving force in the development of science and industry. And Russia must not fall behind other countries in this field. Thirdly, aircraft-building is one of the few high-tech sectors in which Russia is still competitive, despite the hardships of the 1990s. Aviation offers the primary opportunity for implementing the innovation-based development model which is the only alternative to the dead-end path of an economy dependent on raw materials exports. Finally, Russia's vast expanses require us to develop civil aviation as the leading form of transport - in some areas, the only form.

Nuclear war

Steven David, Prof. of political science at Johns Hopkins, 1999, Foreign Affairs

If internal war does strike Russia, economic deterioration will be a prime cause. From 1989 to the present, the GDP has fallen by 50 percent. In a society where, ten years ago, unemployment scarcely existed, it reached 9.5 percent in 1997 with many economists declaring the true figure to be much higher. Twenty-two percent of Russians live below the official poverty line (earning less than $ 70 a month). Modern Russia can neither collect taxes (it gathers only half the revenue it is due) nor significantly cut spending. Reformers tout privatization as the country's cure-all, but in a land without well-defined property rights or contract law and where subsidies remain a way of life, the prospects for transition to an American-style capitalist economy look remote at best. As the massive devaluation of the ruble and the current political crisis show, Russia's condition is even worse than most analysts feared. If conditions get worse, even the stoic Russian people will soon run out of patience. A future conflict would quickly draw in Russia's military. In the Soviet days civilian rule kept the powerful armed forces in check. But with the Communist Party out of office, what little civilian control remains relies on an exceedingly fragile foundation -- personal friendships between government leaders and military commanders. Meanwhile, the morale of Russian soldiers has fallen to a dangerous low. Drastic cuts in spending mean inadequate pay, housing, and medical care. A new emphasis on domestic missions has created an ideological split between the old and new guard in the military leadership, increasing the risk that disgruntled generals may enter the political fray and feeding the resentment of soldiers who dislike being used as a national police force. Newly enhanced ties between military units and local authorities pose another danger. Soldiers grow ever more dependent on local governments for housing, food, and wages. Draftees serve closer to home, and new laws have increased local control over the armed forces. Were a conflict to emerge between a regional power and Moscow, it is not at all clear which side the military would support. Divining the military's allegiance is crucial, however, since the structure of the Russian Federation makes it virtually certain that regional conflicts will continue to erupt. Russia's 89 republics, krais, and oblasts grow ever more independent in a system that does little to keep them together. As the central government finds itself unable to force its will beyond Moscow (if even that far), power devolves to the periphery. With the economy collapsing, republics feel less and less incentive to pay taxes to Moscow when they receive so little in return. Three-quarters of them already have their own constitutions, nearly all of which make some claim to sovereignty. Strong ethnic bonds promoted by shortsighted Soviet policies may motivate non-Russians to secede from the Federation. Chechnya's successful revolt against Russian control inspired similar movements for autonomy and independence throughout the country. If these rebellions spread and Moscow responds with force, civil war is likely. Should Russia succumb to internal war, the consequences for the United States and Europe will be severe. A major power like Russia -- even though in decline -- does not suffer civil war quietly or alone. An embattled Russian Federation might provoke opportunistic attacks from enemies such as China. Massive flows of refugees would pour into central and western Europe. Armed struggles in Russia could easily spill into its neighbors. Damage from the fighting, particularly attacks on nuclear plants, would poison the environment of much of Europe and Asia. Within Russia, the consequences would be even worse. Just as the sheer brutality of the last Russian civil war laid the basis for the privations of Soviet communism, a second civil war might produce another horrific regime. Most alarming is the real possibility that the violent disintegration of Russia could lead to loss of control over its nuclear arsenal. No nuclear state has ever fallen victim to civil war, but even without a clear precedent the grim consequences can be foreseen. Russia retains some 20,000 nuclear weapons and the raw material for tens of thousands more, in scores of sites scattered throughout the country. So far, the government has managed to prevent the loss of any weapons or much material. If war erupts, however, Moscow's already weak grip on nuclear sites will slacken, making weapons and supplies available to a wide range of anti-American groups and states. Such dispersal of nuclear weapons represents the greatest physical threat America now faces. And it is hard to think of anything that would increase this threat more than the chaos that would follow a Russian civil war.

Russia Economy Impact

Collapse of Russia’s economy will result in a nuclear war

Mann 99 (Paul, Center for Defense Information [http://www.cdi.org/adm/1228/transcript.html] Russia’s Nuclear Crisis/ March 21, 1999)

"Russia's deteriorating economy elevates the uncertainty quotient in a number of very important areas. Politically, Russia is increasingly unpredictable and the worsening economy situation affects all aspects of the Russian scene, as the desperate search for revenue streams is exacerbating a number of very serious problems. For example, it has magnified the proliferation threat across the board as growing financial pressures raise incentives to transfer sensitive technologies, especially to Iran." (Before Senate Armed Services Committee, Feb. 2, 1999.) NARRATOR: The director of the Defense Intelligence Agency, Lieutenant General Patrick Hughes, also finds reasons for the United States to worry about Russia's worsening economic situation. LG PATRICK HUGHES, DIA Director: "The number of Russian strategic nuclear warheads will continue to decline, but Moscow will retain a potent strategic arsenal and will increasingly rely on strategic forces to offset its diminished conventional military capability." (Before Senate Armed Services Committee, Feb. 2, 1999.) NARRATOR: The Russian military has been dramatically diminished both in size and capability since the days of the Soviet Union. The humiliating defeat in the 1995 war with Chechnya, a tiny breakaway republic, demonstrated Russia's military weakness Nowadays, Russia's armed forces are better known for horrendous living conditions than for military might. Russian soldiers, once feared as "ten feet tall" by the West, now look considerably shorter. A visit with these raw recruits shows just how far they are from "combat ready." In 1998, Russia's military budget was barely $5 billion, due to the greatly weakened ruble. In 1999, it may shrink to just one percent of the $267 billion the US spends on its military In 1998 alone, the Russian military reduced its strength by 400,000 troops. Its forces stand at 1.2 million today. But even that force is much larger than the economy can sustain and according to reports in the Russian press, an additional cut of 600,000 troops may be needed At "Tank Day," a family holiday for Russia's tank divisions, these weapons may be seeing their final action. The collapse of Russian military forces is highlighted by Pavel Felgenhauer, Russia's leading military correspondent. PAVEL FELGENHAUER: There were no big maneuvers for already almost at least eight years and there -- the commanding generals and (inaudible) are mostly working as, you know, administrators, trying to feed the troops and trying to keep their units together. But when it comes to battle, they're not ready. NARRATOR: Today, the mission of these soldiers is to harvest cabbages to make sure they have something to eat tonight. These are the troops both we and the Russians rely on to man and safeguard a still-mammoth nuclear arsenal. CORPORAL ALEXEI GUSHIN, Sertolova Tank Division (through translator): To make ends meet, we have to work side jobs, such an unloading railway cars at night. Sometimes we get by with the help of relatives, but generally we have to look for money elsewhere because we're certainly not getting it from the military. NARRATOR: When soldiers are worried about feeding their families, nuclear safety drops precipitously on the list of priorities. At home, Corporal Gushin's wife reflects the view of many Russian military families. ELVIRA GUSHINA (through translator): The military simply should not be neglected as they are today. We are left at the mercy of fate. We have to look after ourselves in almost every way because the military is certainly not doing it. MR. CIRINCIONE: What worries many of us is that the traditional elements of control, guns and guards, over these nuclear materials are weakening as the guards are not being paid, as they may be, in some cases, selling their guns to buy food or using their guns for other purposes. We have documented cases of guards deserting their posts around nuclear facilities to go scavenging for food. NARRATOR: Russia's military has become alienated from a government that fails to provide even basic support and from a society that no longer respects and honors it. A recent State Department report to Congress detailed Russia's military crisis. Russia today maintains 6,000 nuclear warheads poised for long-distance delivery. It has more than 20,000 nuclear weapons of all types. There's plenty to worry about. MR. CIRINCIONE: We're watching potentially the de-evolution of a nuclear state, something that the world has never seen before, and that could have catastrophic consequences. You can't ignore something like this. My biggest concern with the Soviet Union is nuclear technology getting out to the wrong hands. Not just the technology, but the actual weapons themselves. In an economy that's in trouble like that, it's entirely possible. MR. MANN: The more immediate danger in nuclear terms might be control over tactical nuclear weapons rather than a breach of strategic command. Because tactical nukes -- there are tens of thousands of them, literally, and they're spread among about 50 storage depots. And that very dispersion is cause for concern. And in some instances, we know that security is not good. NARRATOR: In the early days of the honeymoon between a new Russia and an America most Russians admired, the United States initiated a program to help Russia with its nuclear problems. When the Soviet Union collapsed, nuclear weapons were deployed in Russia, Belarus, Kazakhstan and Ukraine. In 1991, the US Congress, recognizing the increased dangers, created and funded the bipartisan Cooperative Threat Reduction Program, also known as Nunn-Lugar for its original Senate sponsors, Senators Sam Nunn and Richard Lugar. Since then, the US has spent about $3 billion on programs to help dismantle and secure nuclear weapons and materials. The effort is still far from complete, but it stands out as a rare success in cooperative US-Russian relations. MR. CIRINCIONE: These programs are working. They are helping to lock up the material. They are finding jobs for scientists and technicians, even if it's make-work jobs. They are destroying the nuclear delivery vehicles that carry these warheads. These things are making concrete contributions to our national security. NARRATOR: Senator Lugar visited Russia in November, 1998 to inspect the results of his initiative. The US Department of Energy is initiating a program to help Russia's large cadre of unemployed nuclear scientists and technicians. This is the Nuclear Cities Program. MR. CIRINCIONE: You have ten closed cities in Russia, nuclear cities, where scientists and technicians for literally generations have built and perfected nuclear weapons. The unemployment rate in Russia is estimated to be about 20 percent. Inside the nuclear cities, it's estimated to be 60 percent. Many of these technicians and scientists haven't been paid in months and may never get paid. You want to give these scientists and their families some hope that if they stay in Russia, that there might be a future for them. NARRATOR: But there is a real danger. With the declining concern about Russia in the United States, funding for the Cooperative Threat Reduction programs could also decline, and this could happen just as new dangers emerge. One danger is the potential failure of the Russian early warning system. Another is the risk coming from the Year 2000 computer problem. And yet another is that over 100 mothballed nuclear submarines are rusting in Russia's Arctic ports, threatening to leak radioactive waste because officials can't afford to unload their spent nuclear fuel Russia has already experienced several false warnings of missile attacks. When the Soviet Union broke up in 1991, important radar facilities located in other republics were no longer available to Russia. And the Russian military doesn't even have the money to maintain the satellites and radars is still has. MR. CIRINCIONE: The early warning system is, like the other defense systems in Russia, collapsing. It is deteriorating from wear and tear. 5 . The consequences of poor early warning is that Russia may launch a nuclear missile in response to what may or may not be a US attack. NARRATOR: Both the United States and Russia continue to maintain a large percentage of their nuclear missiles on high alert, ready to be launched in moments. MR. CIRINCIONE: Many people are saying it's time to take these missiles off their hair-trigger alert. MR. MANN: The best thing we could do of an immediate nature is greatly to increase the Nunn-Lugar funding that helps Russia with its de-nuclearization. In fact, it might be wise at this point to go one big step further and just simply say to the Russians, let's buy every single nuclear device, every part of their nuclear inventory that they're willing to sell, and presumably, they'd be willing to sell almost all of it because they're broke. I mean, we would save so many tens of billions of dollars in future defense expenditures if we would just simply buy all of Russia's nuclear stuff. We need a master stroke. We need a dramatic action. MAN-on-the-Street: I think we should make every effort to help Russia's economy. My information is that folks in Russia, at least in some parts of Russia outside of the Moscow area, are concerned about whether or not they have enough potatoes to survive through the winter. NARRATOR: While we have focussed on the security of Russia's nuclear arsenal, the root of the problem is Russia's economic crisis and the failure of the so-called reform program carried out by President Yeltsin with considerable American collaboration.

2NC—Iran Prolif Add-On

Russian economic decline prompts nuclear sales to rogue states like Iran

Stephen Sestanovich, George F. Kennan Senior Fellow for Russian and Eurasian Studies, “Russia and the Global Economic Crisis,” 25 November 2008, <http://www.cfr.org/economic-development/russia-global-economic-crisis/p17844>

Unlike most other countries, Russia can always use its arms exports as a means of sweetening commercial deals. At a time when Russian economic needs are especially great, however, its customers are likely to press their advantage-seeking more advanced equipment than they have been offered in the recent past. China, whose own military purchases from Russia have slowed recently, is one Russian client likely to push for such upgrades. Iran and Venezuela are two others of special interest to the United States. It is widely thought that Russia, while steadily increasing its arms sales to Iran, has declined to sell Tehran its most advanced air-defense systems. A protracted economic crisis will surely inspire many inside the Russian defense industry--and probably within the government as well--to call for a review of this policy. All of these strategic adjustments--in defense spending, arms control, pipeline construction, weapons exports--represent matters of high policy for Russia's leadership. Yet, all politics being local, some of the most consequential issues created by the economic crisis may prove to be those that would ordinarily be considered matters of low policy. When production falls and unemployment rises in Russia, many of the Gastarbeiter, or guest workers, that have been needed to fuel the boom are usually sent home. For countries of the Caucasus and Central Asia, which have provided most of this enormous transient labor force (some estimate more than one million workers in Moscow alone), this will be a huge jolt. Quickly, Russia will go from being an important safety valve for socioeconomic discontent to a source of it. In the short term, Russia's neighbors will doubtless see this reflux of their own citizens as a reason to maintain good relations with Moscow, in hopes of winning coordinated management of a potentially dangerous problem.

And, Iranian proliferation leads to a Middle East arms race and nuclear war

Graham Allison, director of the Belfer Center for Science and International Affairs and Douglas Dillon Professor of Government at Harvard’s JFK School of Government, “The Nightmare This Time,” Boston Globe, 12 March 2006, accessed 8/18/09 http://belfercenter.ksg.harvard.edu/publication/1525/nightmare\_this\_time.html

UN Secretary General Kofi Annan's High Level Panel on Threats, Challenges, and Change warned in December 2004 that current developments in Iran and North Korea threatened to erode the entire nonproliferation regime to a point of "irreversibility" that could trigger a "cascade of proliferation." If Iran crosses its nuclear finish line, a Middle Eastern cascade of new nuclear weapons states could produce the first multiparty nuclear arms race, far more volatile than the Cold War competition between the US and USSR. Given Egypt's historic role as the leader of the Arab Middle East, the prospects of it living unarmed alongside a nuclear Persia are very low. The International Atomic Energy Agency's reports of clandestine nuclear experiments  hint that Cairo may have considered this possibility. Were Saudi Arabia to buy a dozen nuclear warheads that could be mated to the Chinese medium-range ballistic missiles it purchased secretly in the 1980s, few in the American intelligence community would be surprised. Given its role as the major financier of Pakistan's clandestine nuclear program in the 1980s, it is not out of the question that Riyadh and Islamabad have made secret arrangements for this contingency. In 1962, bilateral competition between the US and the Soviet Union led to the Cuban missile crisis, which historians now call "the most dangerous moment in human history." After the crisis, President Kennedy estimated the likelihood of   nuclear war  as "between 1 in 3 and even." A multiparty nuclear arms race in the Middle East would be like playing Russian roulette with five bullets in a six-chamber revolver-dramatically increasing the likelihood of a regional  nuclear war.

Iran Prolif Bad: Israel Strikes

Failure to contain Iranian prolif causes Israeli strikes which kill nonproliferation treaty credibility

The Washington Institute for Near East Policy, Presidential Task Force, “Preventing a Cascade of Instability,” March 2009, accessed 8/18/09 http://www.washingtoninstitute.org/pubPDFs/PTF-Iran.pdf

If the international community appears unable to stop Iran’s nuclear progress, Israel may decide to act unilaterally. Whatever Americans may think, Israeli leaders seem convinced that at least for now, they have a military option. However, Israelis see the option fading over the next one to two years, not only because of Iran’s nuclear progress and dispersion of its program but also because improved Iranian air defenses, especially the expected delivery of the S-300 surface-to-air missile system from Russia, are seen by Israel as seriously limiting its military options. Israel therefore may feel compelled to act before the option disappears. If successful, a strike would be publicly condemned but quietly welcomed by some. Success, however, is an uncertain outcome. Even a successful strike might slow Iran only temporarily. And many would see it as both a failure of and a setback for the treaty-based nonproliferation system. The United States itself may pay a high price for an Israeli strike; many will perceive that Washington gave Israel a green light.

And, Israeli strikes lead to nuclear war

Louise Nousratpour, “Britain – On the march to nuclear war,” Morning Star, 13 January 2006, lexis

Peace campaigners warned yesterday that the world faces a renewed threat of "all-out nuclear war" unless people wake up to the dangers of US and EU sabre-rattling against Iran. A meeting of European Union foreign ministers agreed that Iran should be referred to the UN security council over the resumption of its nuclear programe. The measure could lead to international sanctions against Iran. EU foreign policy chief Javier Solana and foreign ministers of the so-called E3 group - Germany, Britain and France - also called for a special session of the International Atomic Energy Agency to decide the referral. The meeting followed revelations that Iran had broken UN seals in order to restart its uranium enrichment activities, which the US and EU claim are a prelude to developing nuclear weapons. Much to the horror of peace campaigners, there is strong evidence that "coalition" partners, including the US, Israel and Turkey, are already in the final planning stages of a strike against Iran. Top Israeli military officials, including the Prime Minister, have even set a deadline for the end of March and US military sources have said that an attack would be comparable to the "shock and awe" bombing raids on Iraq in March 2003. Campaigners accused the nuclear states - Britain, US, Israel and France - of "double-standards" and "nuclear hypocrisy." They warned that any attack on Iran would destabilise world peace and could escalate into a devastating worldwide nuclear conflict. Stop the War Coalition convener Lindsey German said that people have a "very short memory," urging them to remember that the exact same arguments about "weapons of mass destruction" were used to justify the disastrous Iraq war. "The biggest threat to world peace is the insane behaviour of the Bush adminstration in the Middle East," she added. "Any attack on Iran, be it UN sanctions or military action, must be strenously opposed, because any such move will only bring us closer to a third world war - and even, possibly, all-out nuclear war.

And, NPT collapse leads to extinction

Tadatoshi Akiba, mayor of Hiroshima, “Mayor’s Speech at the MPI Strategy Meeting,” 25 April 2003, accessed 8/19/09 http://www.city.hiroshima.jp/shimin/heiwa/mpi-speech.html

Not only has the DPRK declared that it will withdraw from the NPT, but we know now that it is in possession of nuclear weapons already. The Bush administration has pointedly refused to rule out the use of nuclear weapons. In a broad sense, it would appear that the NPT regime is on the verge of collapse. And yet, the NPT has long been the only brake limiting the proliferation of nuclear weapons. Its collapse would destroy any chance of nuclear disarmament or abolition, leading in all likelihood to the actual use of a nuclear weapon. One use of such a weapon could, in turn, escalate to a nuclear war and, perhaps, the extinction of the entire human species.

AT: Russia Will Weaponize Space

Russia doesn’t want to weaponize space but threatens to retaliate against any country that does

Graham and William 2007(Thomas, Marshall “Waterlo, Ontario: Project Ploughshares”, August 2007. Space Security) spacedebate.org DOA 7-21-11

In all of its military doctrine documents since 1992, Russia has expressed concern that attacks on its early warning and space surveillance systems would represent a direct threat to its security. Therefore, a basic Russian national security objective is the protection of Russian space systems, including ground stations on its territory. These concerns derive from Russia's assessment that modern warfare is becoming increasingly dependent on space-based force enhancement capabilities. In 2001, Anatoliy Perminov, then Commander-in-Chief of the space corps, stated that the international trend of armed force modernization demonstrates "the continuously rising role of national space means in ensuring the high combat readiness of troops and naval forces." In practical terms, Russian military space policy appears to have two main priorities. The first is transferring to a new generation of space equipment capabilities, including cheaper and more efficient information technology systems. The second priority is upgrading the Russian nuclear missile attack warning system. Together, these recent developments are seen as having a critical role in guaranteeing Russia's secure access to space. Russia has expressed concern about the potential weaponization of space and the extension of the arms race to outer space, especially in light of the development of US missile defense systems. Thus, Russia has actively argued for a treaty prohibiting the deployment of weapons in space. In the interim, Russia has pledged not to be the first to deploy any weapons in outer space and has encouraged other space-faring nations to do the same. However, various Russian officials have also threatened retaliatory measures against any country that attempts to deploy weapons in space.

AT: Red Spread

Decline doesn’t solve aggression—but a transition to a tech-driven economy solves Russian outlash

Cohen and Ericson 9, both Ph D, Senior Research Fellow, The Kathryn and Shelby Cullom Davis Institute for International Studies, Chair of the Department of Economics at the East Carolina University and former Director of the Harriman Institute at Columbia University. http://www.heritage.org/research/reports/2009/11/russias-economic-crisis-and-us-russia-relations-troubled-times-ahead

Despite the downturn, Russia has pocketed the Obama Administration's concessions on missile defense deployment in Poland and the Czech Republic, ignored the White House pleas for cooperation on Iran sanctions, and continued to pressure Georgia and Ukraine. Russia is also continuing its military modernization and establishing military bases from the Fergana Valley in Central Asia to the Black Sea. At the same time, Moscow is a U.S. partner in arms control and resupplying U.S. and NATO forces in Afghanistan. A senior Obama Administration official has characterized Russia as "neither friend nor foe" of the West,[[3]](http://www.heritage.org/research/reports/2009/11/russias-economic-crisis-and-us-russia-relations-troubled-times-ahead" \l "_ftn3)while the United States and NATO are defined as principal adversaries in the Kremlin's national security documents. Clearly, the type of economy and form of government that Russia assumes are strategic issues for the U.S. The Russian leadership is divided on these issues. The foreign and security policies arising from the current commodity-dependent export model, which is promulgated by Prime Minister Vladimir Putin and First Deputy Premier Igor Sechin drastically differ from policies based on a knowledge-based, high-technology economy supported by President Dmitry Medvedev and economic reformers. An economic model based on natural resources would tend to perpetuate authoritarianism, nationalism, and corruption, and it would require Russia to follow a neo-imperial policy throughout the Commonwealth of Independent States (CIS) to support Russian domination of the pipeline system. In a way, the petrostate model and the associated militarized foreign policy require Russia to label the U.S. as an enemy. A more open and diversified economy would be more compatible with democratization and the rule of law.

AFF—Non-UQ—Aerospace

Non-unique—Russia’s aerospace industry is terminally tanked, multiple reasons

Oleg Panteleev, Chief Editor of Aviaport, graduated from Moscow Aviation Institute (aircraft engine department) modified 9/23/2010 <http://www.russianavia.net/index.php#state=InterviewDetail&id=61>

The history of Russian aerospace industry has always been turbulent, even during the ‘golden’ Soviet times. As an expert in this sphere, how do you estimate the current position of the industry in Russia and the competitiveness of Russian aircraft? In order to estimate the competitiveness of Russian aerospace industry against the foreign aircraft, we should first keep in mind its current position in general. Back in early 90s it became clear that State participation in this sphere was shrinking dramatically… As a result, the Soviet heritage in civil aviation is two mass-produced long-haul modern aircraft: Il-96 and Tu-204. Regional turbojet Il-114, that was to replace An-24 for local flights in the European part of the USSR, did not go into mass production… efforts are being made to resuscitate the program. It was not much easier for the aircraft that appeared later, in independent Russia. For Tu-334, a short-haul aircraft, and the amphibian aircraft Be-200, mass production was not developed even after its certification was completed. The next aircraft, regional jet An-148 with a type certificate, was a joint development of Russia and Ukraine with mass production in Voronezh and Kiev. Finally, the short-haul Sukhoi SuperJet 100, created under broad international cooperation, is being tested and has not yet been certified. All the mentioned aircraft have a very high technological level and flight characteristics whereas their actual efficiency, that is determined by sales financing and after-sale service, is lower than that of the world aircraft construction leaders. That means that the aircraft are competitive as such but not as market products. Competitiveness of Russian aviation equipment will depend on whether it will be possible to concentrate on the chosen segments and projects. As a matter of fact, up to now the federal budget has been the most important but limited source of financing for all the developments. Vertically integrated structures covering the whole production cycle have been created in the industry in Russia to increase its competitiveness and, to some extent, stop the internal competition… However, it is still too early to discuss elimination of internal competition and concentration on the priority spheres. Today the largest problems of the Russian aviation are a long period of stagnation, low financing and disintegration; the main challenge in future will be the absence of unique breakthrough products that could overcome the foreign samples in terms of integral efficiency, although Russia has not yet lost the necessary production potential.

AFF—AT: Russian Competitiveness

Russia isn’t competitive now—multiple alt causes doom technological advancement

James. E. Oberg, American space journalist and historian, Toward a Theory of Spacepower, Chapter 22, 2011

At the same time, Russia shows no signs of developing a capability for major innovation in spacecraft engineering or of demonstrating more than lip-service interest in quantum advances in space operations capabilities. Incremental progress has been the watchword for decades, usually not by choice but out of necessity because all previous attempts at breakout projects (human lunar flight, advanced robotic Mars probes, the Buran shuttle, the Polyus-Skif family of orbital battle stations) ended in humiliating frustration. Providing commercial launch services for foreign customers has provided multidimensional benefits to Russia. Beyond the significant cash flow, such activities fund booster upgrades and, in the case of converted military missiles, fund validation of lifetime extension efforts for still-deployed missile weapons. Military applications of space systems remain uninspired, with critical constellations (such as the missile early warning net) still significantly degraded and likely to remain so for many years. Russian officials have evidently decided that, despite any public posturings over U.S. military threats, there is essentially no prospect of actual hostilities in the foreseeable future and hence little pressure to reconstitute military space assets to a Soviet-era level. Russia retains a nuclear-armed operational antimissile system around Moscow that, if upgraded to hit-to-kill guidance, could provide significant antisatellite capability; it is also developing small robotic rendezvous spacecraft similar to U.S. projects that have potential antisatellite capabilities at any altitude into which they can be launched. Attempts at domestic commercialization of space-related services, including communications, navigation, and mapping, remain seriously—perhaps irremediably—hamstrung by the recent resurgence of a traditional Russian top-down structure of authority. Bureaucrats are being ordered to implement wider use of space infrastructure, and after many years of rosy reports of progress, Moscow may realize that it is almost all, as usual, a sham. There is still little indication of successful exploitation of space discoveries and space-developed technologies (what NASA and the Europeans call spin-offs) as a means of improving the technological skills of Russian industry. The space industry, as a component of the national defense industry, remains strictly compartmentalized from Russia's civil economy, and the resurgence of broad espionage laws (and several recent highly publicized convictions) will keep this ghettoization in force. This in turn may require other government measures, from patent purchase to industrial espionage, to acquire technologies that some Russian industries may already possess but are in practice forbidden to share internally.

Alt causes—population decline and public disinterest in space

James. E. Oberg, American space journalist and historian, Toward a Theory of Spacepower, Chapter 22, 2011

However, none of these intentions has much chance of success unless the Russians find a way out of the looming demographic crisis that mass mortality is confronting them with. In a society and an industry where monopolization of knowledge was power and sharing it often led to legal prosecution, behavior must change, and fast. This must be done so that space workers a decade from now, without the in-the-flesh guidance and advice of the old-timers, will be able to draw on their team knowledge that survived the passing of its original owners and was preserved in an accessible, durable form. The alternative is a return to the learning curve of more frequent oversights, mistakes, and inadequate problem solving of the dawn of the space age—with its daunting costs in time, treasure, prestige, and even human lives.

AFF—AT: Russian Economy Impact

Empirics prove no doomsday risk from Russian instability or economic decline

World Policy Journal, 12/22/03

Using extensive interviews with participants in all three administrations, and memoirs by former officials, they paint a compelling picture of officials often over-whelmed by the challenge of an entirely new reality. The unexpected collapse of communism and of the Soviet Union, coming just after the GulfWar, left them with no road map to understand how Russia and other post-Soviet states might develop. Nightmare scenarios suggested themselves: nuclear war between Russia and Ukraine; weapons proliferation on a terrifying scale; Yugoslav-type ethnically based civil war on the territory of the former Soviet Union; mass starvation; economic collapse--the ominous possibilities were endless. That these "dogs did not bark" is testimony to the unwillingness of people in the post-Soviet space to engage in armed conflict and to Western assistance that staved off famine and economic collapse. The failure of catastrophic scenarios to come about is one indicator of success--but if one were to measure America's contribution to transforming Russia in more positive ways, the evidence is more mixed. If a minimalist definition of success was the absence of catastrophe, the maximalist definition was the creation of a fully functioning democracy in Russia with a transparent market economy and the rule of law. That has not happened yet, and it is unclear when it will. So far, there is no consensus about what would constitute a realistic timetable for Russia's democratic development.

Demographic shifts make Russian economic decline inevitable—government statistics prove

Banking and stock exchange. Finance. Economics (Russia), 2/3/2005

However, by the time it is going to happen, it can prove that there is no one in Russia to double GDP. According to Russian Statistics, beginning with 2007, number of economically active people will start shrinking by 1 million people a year. According to Mr. Sokolin, head of the Russian Statistics, demography "will be a serious economic limitation of our growth." "Then doubling of GDP will be out of the question," agrees Mr. Klepach.

Russian economic decline doesn’t cause lash out or war

The New Republic, 2/7/2000

At the time and since, observers of the events of 1989-1990 in Europe have been properly amazed at what happened and at what did not happen. The Soviet empire collapsed in Eastern Europe. Divided Germany was unified. Democratic governments replaced communist dictatorships in Eastern Europe. The Soviet Union itself imploded and was reincarnated as quasi-democratic, quasi- authoritarian Russia. Yet a unified Germany has not become a menacing Fourth Reich, and Russia, despite a collapse of its economy and the spectacular loss of the Cold War, did not turn in bitterness and frustration to the alliance of nationalists and communists who were seeking to reverse the humiliations of a decade ago

AFF—AT: Prolif Bad

Any proliferation will be slow

Kenneth Waltz, Professor of Political Science at UC Berkeley, Georgetown Journal of International Affairs,v1 n1, Winter/Spring 2000, http://www.ciaonet.org/olj/gjia/gjia\_winspr00f.html, accessed 8/11/02

It is now estimated that about twenty–five countries are in a position to make nuclear weapons rather quickly. Most countries that could have acquired nuclear military capability have refrained from doing so. Most countries do not need them. Consider Argentina, Brazil, and South Africa. Argentina and Brazil were in the process of moving toward nuclear military capability, and both decided against it–wisely I believe–because neither country needs nuclear weapons. South Africa had about half a dozen warheads and decided to destroy them. You have to have an adversary against whom you think you might have to threaten retaliation, but most countries are not in this position. Germany does not face any security threats–certainly not any in which a nuclear force would be relevant. I would expect the pattern of the past to be the same as the pattern in the future, in which one or two states per decade gradually develop nuclear weapons.

Nuclear proliferation won’t happen—it’s not worth the cost

Henning Riecke, Post-Doctoral Fellow at the Weatherhead Center for International Affairs, Assistant Professor International Relations at Schiller International University, 2000, Preventing the Use of Weapons of Mass Destruction, p. 46

Nuclear weapons proliferation has slowed down. Some possible candidates for proliferation have been either forced to destroy their program, like Iraq, or have dropped the nuclear option. This is a sign, that the non-use of nuclear weapons, the ‘nuclear taboo’ is gaining ground. This finding is in contradiction to the signal sketched out above, that the use of atomic weapons in certain cases has a legitimate character. The high costs in each case, however, might weigh heavier than the idea of appropriateness. Chemical and biological weapons programs are still pursued by a small number of states that remain unimpressed by the NATO campaign. They show no sign of entering the relevant non-proliferation regimes (or, as in the case of Iran, they do with obvious qualification).

AFF—AT: US-Russia War

There is zero threat of war with Russia

George Perkovich, Vice President for Studies at the Carnegie Endowment, Foreign Affairs, March/April, 2003

As for Russia, a full-scale war between it and the United States now seems inconceivable. Given the desires for larger cuts in nuclear forces that Russia displayed in negotiating the 2002 Moscow Treaty, Russia hardly seems enough of a threat to justify the size and forward-leaning posture of America's present arsenal.

No risk of US-Russian nuclear war

Robert A. Manning, senior fellow and director of Asian studies at the Council on Foreign Relations, 3/10/2000

We don't want to go any lower because we need these weapons for nuclear deterrence, according to State Department spokesman James Rubin. But how many nukes do we need for deterrence to be credible? China, which President Clinton has talked of as a "strategic partner," has a grand total of 20 - count them - strategic warheads that could hit the United States. Nuclear wannabes like North Korea, Iran, and Iraq would have only a handful if they did manage to succeed in joining the nuclear club. Russia, which has 6,000 strategic warheads, is no longer an adversary. During the Cold War, it was not hard to envision a conventional war in Europe escalating into nuclear conflict. But today it is difficult to spin a plausible scenario in which the United States and Russia escalate hostilities into a nuclear exchange. Russia has no Warsaw Pact, and not much of a conventional force to speak of. Yet U.S. nuclear planners still base their targeting plans on prospective Russian targets, though no one will say so.

AFF—AT: Iran Prolif

Iran is proliferating now – and Middle Eastern security is being compromised as a result – both the internal and the impact are non-unique

Tariq Khaitous, visiting fellow at the Washington Institute with focus on Arab reactions to Iran’s nuclear program, “Iranian Elections Increase Middle East Proliferation,” The Washington Institute for Near-East Policy, 27 July 2009, accessed 8/19/09 http://washingtoninstitute.org/templateC06.php?CID=1315

It is obvious that the current situation in Iran spells that the regime intends to continue its nuclear program. While that is the target of the Obama administration's agenda in the Middle East, the reinstitution of Mahmoud Ahmedinajad to the Iranian presidency will also cause nuclear and conventional weapons proliferation to take additional dimensions in the rest of the Middle East as well. There is evidence that neighboring Arab states had been initiating their own troubling nuclear activities prior to the Iranian elections. Just past may, the IAEA reported traces of enriched uranium in Egypt. It is now widely accepted that the Syrian site bombed by Israel in September, 2007 contained a secret nuclear reactor being built with North Korean assistance. In addition, countries of the region are upgrading their conventional arsenals and military spending to unprecedented levels. Middle East security is growing increasingly precarious in the shadow of Iran's nuclear program that will evolve during Ahmadinejad's next term.